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The Evolving Role of the DIRMOBFOR: A Critical Analysis of Current Doctrinal Trends

by

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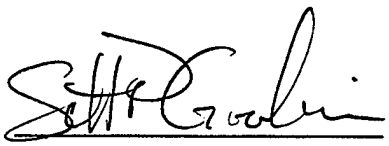
A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

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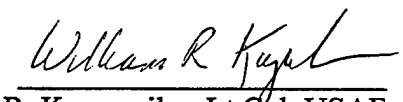

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ABSTRACT

This paper explores the evolution of the role of the Director of Mobility Forces (DIRMOBFOR) in command and control of the theater air mobility mission in support of a joint force commander. The discussion is framed by two historically competing imperatives that have driven the command and control structure in different directions. The struggle is between the need to manage finite air mobility resources in the most efficient and effective manner possible and the need to achieve unity of command. The thesis is that the DIRMOBFOR, with changes contained in proposed service doctrine as well as some recommendations by the author, has the potential to strike an appropriate balance between the two imperatives. The paper summarizes some historical lessons learned regarding command and control of air mobility forces, reviews current doctrine, and explores the application of present doctrine in some recent contingency operations. It then highlights problems encountered, examines service doctrinal proposals, and offers recommendations to further refine doctrine for command and control of theater air mobility forces. The conclusions are 1) that air mobility forces work best as a seamless system commanded by a senior officer responsible to the joint force commander, 2) that present doctrine fractured a previously seamless system, 3) that service proposals will mend many of the fractures, and 4) that a full return to a seamless system can be achieved with some additional refinements, such as delegating OPCON authority to the DIRMOBFOR.

"...airlift is...a foundation of US national security at the strategic level and a crucial capability for operational commanders within a theater."[1]

"Clear and effective command relationships are central to effective operations and organizations."[2]

Air Force Doctrine Document 1

INTRODUCTION

The difficult, often contentious question of the control of air mobility forces operating within a given theater of operations traces its roots to the 1920's.[3] The central issue revolves around the struggle between two significant yet competing imperatives. The need to provide the most effective, efficient use of scarce mobility resources often conflicts with the requirement to observe unity of command in a theater. Each necessitates a different command and control arrangement with inherent advantages and disadvantages. Each approach has strong arguments in its favor and each has been tried with varying degrees of success. The thesis of this paper is that the present role of the Director of Mobility Forces (DIRMOBFOR) has the potential to strike an appropriate balance between the two imperatives, but it requires further refinement before a CINC can fully realize the DIRMOBFOR's potential. The analysis begins with a summary of past and present command arrangements, followed by a recap of current doctrine. An examination of recent experiences will highlight some shortcomings. Next, an analysis of pending service proposals explores some potential remedies. Finally, I will offer several recommendations to further improve the DIRMOBFOR to the CINC's benefit.

HISTORICAL BACKGROUND

The United States Air Force emerged from the Vietnam War with a number of lessons related to air mobility forces, particularly airlift. One of the most significant findings of the post-war report, entitled Project Corona Harvest, was that large theater airlift operations work best when controlled by a central organization, headed by a senior officer with an airlift background.[4] One outgrowth of the Corona Harvest report was the consolidation of all airlift forces under the Military Airlift Command (MAC) in 1974.[5] Under this arrangement, MAC provided peacetime command and control for all airlift. During contingencies, when a theater commander required a significant airlift capability in theater, MAC deployed a Commander, Airlift Forces (COMALF), along with a command and control element. The COMALF was under the operational control (OPCON) of the theater commander, exercised OPCON over the theater airlift effort, and integrated intertheater or strategic airlift into theater mobility planning.[6] The system favored an efficient, appropriate use of airlift resources to provide seamless "fort to foxhole" air mobility.

Such was the state of affairs in 1990 when the Persian Gulf conflict erupted. MAC deployed a COMALF in a "dual-hatted" role. He acted as both commander of airlift forces under OPCON of the theater commander and as MAC's representative to manage strategic airlift forces transiting the theater.[7] As in the 1970's, this command structure was again validated. The Joint Forces Air Component Commander (JFACC), Lt Gen Charles Horner, cited the intermediate command structure as "instrumental in resolution of span of control problems."[8] The COMALF was the single point of contact able to authoritatively address theater airlift force size, basing, tasking, airspace allocation, and training issues.

In 1992, as part of the post cold war Air Force reorganization, MAC became the foundation of today's Air Mobility Command (AMC) as it added the bulk of air refueling aircraft to its strategic airlift assets and relinquished its theater airlift fleet. AMC's focus was the strategic or intertheater mobility mission of "fort to port," while the geographic CINCs were responsible for managing the theater mobility tasks of "port to foxhole."[9] Each was to be responsible for command and control of its respective portion of the air mobility effort.[10] AMC established its Tanker Airlift Control Center (TACC) to exercise worldwide command and control over strategic mobility forces, while the theaters were left to establish their own systems. COMALF responsibilities as theater airlift commander during contingency operations were elevated to the JFACC; thus the "dual hatted" airlift commander was eliminated. This arrangement granted priority to theater unity of command and relegated mission effectiveness to lower importance. In COMALF's place, AMC substituted the DIRMOBFOR. Today's command and control arrangement for theater mobility forces was instituted.

CURRENT DOCTRINE

Current command and control arrangements are specified in joint and service doctrinal publications.* Specified positions and functions apply only when a theater stands up an Air Operations Center (AOC) as part of a joint task force (JTF).[11] Joint Pub 4-01.1 describes the DIRMOBFOR as a senior officer familiar with the theater and with an extensive background in airlift operations, whose primary role is as an assistant to the JFC

* This discussion centers on command and control schemes for contingency operations in a theater without an established control mechanism. Clearly, a CINC would use an existing peacetime structure before standing up a new organization.

and JFACC in coordination of theater airlift issues. DIRMOBFOR exercises coordinating authority between necessary agencies to resolve airlift issues. Coordinating authority, as defined in Joint Pub 3-0, is authority to require consultation, but not to compel agreement.[12] The DIRMOBFOR also works through AMC's deployed Air Mobility Element (AME) to coordinate theater strategic airlift flow. The AME may or may not be integrated into the theater's AOC, which serves as the JFACC's command and control organization. The AME deploys as an extension of the TACC and remains under AMC's OPCON, not the theater's.[13]

Joint Pub 3-17 describes how command and control of the intratheater portion of the mobility mission is exercised through an Airlift Coordination Cell (ALCC) formed within the AOC. ALCC functions include planning, coordinating, and managing the execution of theater airlift operations. The Chief of the ALCC is subordinate to the AOC Director. The ALCC coordinates with the AME and DIRMOBFOR, if they have been established in the theater, in order to integrate the two air mobility operations.[14] Figure 1 details the current command and control arrangement.

Service doctrine for airlift operations, defined in Air Force Doctrine Document 30, mirrors joint doctrine. Another document, the JFACC Primer, describes in detail JFACC duties and responsibilities. However, this extensive treatment of planning and executing an air campaign makes no reference to intratheater air mobility operations.[15]

RECENT EXPERIENCE

Since 1992, air mobility forces have been employed numerous times in contingency operations under the command and control scheme specified in present doctrinal publications. One of the earliest experiences was Operation RESTORE HOPE in Somalia

during 1993. RESTORE HOPE's DIRMOBFOR noted that lack of a central authority inhibited efficient use of limited airlift resources during the critical initial deployment phases. As a result, prioritization of airlift did not fit JFC guidance, which degraded overall mission accomplishment.[16]

While not employing actual forces, the Air Force's BLUE FLAG exercise series allows joint forces to test command and control concepts in a variety of scenarios. The 1995 exercise identified that AME and ALCC structure was not conducive to effective mission execution despite efforts to integrate them. Poor coordination between the two agencies resulted in exceeding airfield ramp capacities and competition for airfield usage and common use assets such as loading equipment.[17]

Operation JOINT ENDEAVOR, the airlift supporting peacekeeping efforts in Bosnia-Herzegovina, also provided lessons for airlift command and control. Organizational structure took some time to develop but eventually resembled doctrinal models. The Air Component Commander for Implementation Force (IFOR), a combined task force, exercised operational control of airlift via a Regional Air Movement Control Center (RAMCC) embedded within a Combined Air Operations Center.[18] One of the lessons identified during buildup of forces was that the theater CINC's staff lacked expertise in large-scale airlift operations. Consequently, the AME that had deployed to support strategic airlift operations was asked to assume responsibility for planning and managing intratheater airlift operations during the initial days.[19] RAMCC eventually assumed responsibility for intratheater missions. The bulk of the early-arriving airlift consisted of C-17 and C-130 aircraft originating from the same airfields and flying to the same destinations in support of the same mission, all the while controlled by two distinct, separate command and control systems. The RAMCC

Director was dual-hatted as the DIRMOBFOR with responsibility for planning and executing theater airlift missions. Once the AME was redeployed, he was able to exercise only limited control over intertheater missions by assigning hard arrival times into area airfields.[20] Lack of centralized focus and control resulted in loss of synergy, mutual support, and effectiveness.[21] The ultimate impact was decreased performance in support of the theater commander. JOINT ENDEAVOR, in particular, highlighted doctrinal problems with the DIRMOBFOR structure.[22]

The final operation providing significant lessons for the DIRMOBFOR's role is SOUTHERN WATCH in Saudi Arabia, supporting United Nations resolutions against Iraq. The air component within Joint Task Force Southwest Asia (JTF-SWA) is structured in accordance with current doctrine. The air component commander exercises OPCON through an Air Operations Center. An ALCC is embedded within the AOC to oversee airlift forces OPCON to the joint task force. The ALCC Director is typically a senior major (O-4) or junior lieutenant colonel (O-5) on a 90-day temporary duty tasking.

Routine sustainment operations do not require a significant number of intertheater airlift missions dedicated to supporting JTF-SWA. Thus, a DIRMOBFOR and AME are not normally present. Day-to-day operations are well established and function smoothly.[23] During the frequent force surge deployments in response to Iraqi intransigence over the past few years, however, large flows of intertheater mobility aircraft have been necessary. Twice in 1998, during Operations DESERT THUNDER and DESERT FOX, a DIRMOBFOR and AME were deployed to Southwest Asia. There was confusion during DESERT THUNDER over theater attached airlift forces. The ALCC and AME were often in conflict over responsibilities for mission reporting, itinerary deviation authority, and waiver authority for

various issues.[24] The result was confusion for both customers and operators of theater airlift. This problem reoccurred during DESERT FOX.[25] Clearly, the current approach to command and control of mobility operations within a theater has shortcomings. The next section summarizes these shortcomings and introduces some additional problems with current doctrine.

PROBLEMS WITH PRESENT SYSTEM

Recent joint operations exposed flaws within the current airlift control structure. Current doctrine effectively prescribes two separate command and control systems functioning within a given theater. The air mobility mission, however, can better be represented as a continuum than two discrete spheres of responsibility. The two command and control structures--AME and ALCC--could operate effectively in parallel given a strong "bridge" to integrate them, but the JFACC is the wrong individual to assume that role. The JFACC is normally a member of the combat air forces, not the mobility air forces. Additionally, the focus of the JFACC's doctrinal guidance is on employment of air *power* forces, not air mobility. Consequently, he will not be well versed in training, capabilities, requirements, and appropriate employment of mobility forces. Neither is the JFACC likely to have the time or resources to devote to planning air mobility operations. As a result, he may unknowingly neglect important basing, airspace allocation, and resource considerations and produce an unintended, adverse impact on the JFC's overall mission.[26] JOINT ENDEAVOR provided an unfortunate example when encampments were built on aircraft parking areas, reducing airfield throughput and extending the overall deployment timeline.[27] In short, the JFACC needs a strong right hand to oversee the air mobility mission.

The DIRMOBFOR was an attempt to provide mobility expertise to the JFACC. However, the DIRMOBFOR's responsibilities are only generally defined in joint publications. The unfocused command arrangements described earlier and possession of only *coordinating* authority handicap the DIRMOBFOR's ability to extract maximum productivity from the air mobility system. More frustration awaits mobility forces when a DIRMOBFOR is not assigned and responsibility for the mobility mission rests with a mid-grade officer--the ALCC Director. Buried several rungs in the command chain below the air component commander, this individual lacks the position, rank, influence, and access necessary to promote the mobility forces' needs and capabilities.[28] This situation is exacerbated in a combined operation such as JOINT ENDEAVOR.[29] It is clearly in the JFC's best interest to invest a senior mobility officer with the necessary authority to establish and operate an effective theater air mobility organization that will optimize support of his mission.

Capabilities of current generation aircraft have also blurred distinctions between inter- and intratheater airlift. The C-17's ability to perform direct delivery of cargo and personnel from CONUS bases to virtually any airfield on the globe presents a dilemma to the command and control system. If it operates between theaters, AMC retains control. A direct delivery mission in support of the JFC, on the other hand, gives the theater an interest in OPCON. An even more vexing problem is that of AMC aircraft conducting direct combat employment missions such as long-range airdrop missions, inserting paratroopers into a theater from staging bases in another theater. The issue of who should exercise control is of fundamental concern and is a question not adequately addressed in present doctrine.

Others have chronicled this struggle.[30] Conflicts over resources which support both inter- and intratheater missions; duplication of effort; scheduling of airframes inappropriate to the mission, resulting in excessive operating costs and/or unused capacity; confusion on the part of airlift operators and customers; and poor communication due to lack of standardized processes and procedures have all been documented as resulting from the seams in the air mobility system. All have a negative impact on the execution of a joint force commander's operation. With the United States increasingly dependent on global mobility to respond to crises with an expeditionary military, we can ill afford a command and control doctrine which inefficiently uses "high demand, low density" mobility resources.

PROPOSED DOCTRINE

The Air Force has recognized the seams in the mobility system, particularly those existing at the interface with the theater. It has initiated steps to close the gaps. One of the first was an organizational change, when the Air Force shifted its C-130 fleet back to AMC control. To explain this reassignment, Air Force officials cited precisely the concern revealed above: a critical lack of mobility expertise in other commands.[31] A simple organizational revision, however, is insufficient to address the shortcomings of present command and control arrangements. Draft doctrine documents are currently in coordination. Their goal is to develop a truly seamless air mobility system during peacetime, which in turn will simplify the transition to contingency operations.[32]

The draft doctrine reaffirms the AOC's position as the focal point for command and control of a joint task force's air component. Within the AOC, the Air Mobility Division (AMD) will be created as one of four core divisions. The AMD will plan, coordinate, task,

and execute air mobility operations within the JTF's area of operations. The other three divisions will be dedicated to managing the combat aircraft. The AMD will be directed by the DIRMOBFOR, who works directly for the JFACC. The AMD will contain teams focused on intratheater airlift and air refueling. It will also contain the AME to manage intertheater airlift issues. The DIRMOBFOR's responsibilities will be to direct AMC air mobility support, coordinate tasking intertheater air mobility forces with AMC, direct tasking of intratheater air mobility forces attached to the JFC, coordinate with the AOC Director to integrate and deconflict air mobility operations with all other air operations, and coordinate the most effective use of resources in accomplishing the JFC's mission. The DIRMOBFOR still will have no command authority but will be responsible to the JFACC for all air mobility operations.[33]

A unique aspect of the proposed doctrine is a building block approach that shows the transition of command and control relationships of air mobility forces from peacetime to contingency operations. It acknowledges that command and control of airlift forces is a complex task involving three interdependent, distinct structures (intertheater, intratheater, and JTF) that must be fully integrated.[34] The proposed doctrine demonstrates how a joint force commander might be given control of mobility forces and the resulting command relationships. Figure 2 in the Appendix depicts the proposed arrangement.

CRITIQUE OF PROPOSED DOCTRINE

To this point, we have reviewed historical lessons, considered current doctrine, explored recent application, discussed shortcomings, and examined proposed doctrinal changes. We must assess the proposal in light of two precepts.

The first relevant precept is that air mobility must remain responsive to the needs of the geographic combatant commanders. As the warfighters, they are the principal customers of the air mobility system. Unity of command is a critical consideration. While not an end in itself, unity of command assures forces are aligned to support JFC objectives.

Second, air mobility works best as a seamless system, especially with regard to command and control.[35] Mobility forces will remain a scarce, finite national resource, implying a need for centralized control to ensure limited assets are appropriately assigned.[36] A seamless system is one in which procedures and organizations are transparent to the customer and which is able to provide "fort to foxhole" service. Present doctrine fails this test.

Given the primacy of unity of command and seamlessness, two questions present themselves. The first question to be addressed is how responsive a proposed structure will be to JFC requirements. The draft arrangement preserves unity of command as the DIRMOBFOR and AMD remain under operational control of the JFACC. The JFACC exercises OPCON of the theater mobility forces *through* the DIRMOBFOR, a clear improvement over the previous advisory role. The DIRMOBFOR, while still only having coordinating authority, has more clearly defined responsibilities. He is charged with implementing the theater commander's concept of operations. Direct incorporation of the AME within the AMD, and designating the DIRMOBFOR its director should enhance integration of strategic and intratheater mobility efforts. However, the draft doctrine is unclear on who has OPCON of the AME. It still deploys as an extension of the TACC.[37] It is incompatible to have an element "directed" by a theater commander while it remains under OPCON of AMC. The designation of DIRMOBFOR as an organizational peer of the AOC

Director assures the JFC of the presence of a senior officer able to articulate the unique needs and capabilities of mobility air forces. By having a command and control organization fully plugged into both his theater and the global mobility system, a JFC gets the best of both worlds: control of theater mobility assets and improved access to all air mobility resources. Overall, this proposed structure preserves unity of command and improves support to the theater.

The second question concerns how seamless this new system would be--how efficiently and effectively the system would operate. Proper employment of air mobility forces depends on standardized procedures.[38] The proposed doctrine establishes the AMD as a core division within the AOC. It is to be staffed by individuals well versed in air mobility operations, drawn from a command (AMC) responsible for authoring standardized procedures, and directed by a senior officer with a full appreciation of mobility operations. Unlike the present structure, this more fully integrated team will be better able to match requirements with appropriate assets to maximize usage of constrained mobility resources and support JFC priorities. There will be few questions in the minds of either mobility operators or customers as to where to turn to resolve issues or obtain mobility support. The single point of contact, the DIRMOBFOR, supported by the AMD, will generate the transparency of organization and process needed to make the system work seamlessly. The draft service doctrine is clearly an improvement over current joint doctrinal command and control, but there is room for even more improvement.

RECOMMENDATIONS

The draft doctrine enhances the role of DIRMOBFOR to the overall benefit of the JFC. The proposal represents a partial return to the historical dual hatted COMALF structure. To fully realize the potential of the proposed command and control structure, we should complete the return with a single bold stroke. The JFACC should delegate OPCON of theater air mobility forces to the DIRMOBFOR.

DIRMOBFOR OPCON would not violate unity of command within the theater nor would it imply an elevation of the DIRMOBFOR to the same level as the JFACC. It would resolve the DESERT SHIELD/DESERT STORM span of control problem. It would free the JFACC to concentrate on his primary task: combat employment, rather than deployment and sustainment.

Creation of a subordinate functional commander is not without precedent in joint doctrine. Joint Pub 3-0 permits a JFC to establish a functional component, with OPCON, where unity of effort is especially critical to a given function.[39] It would grant DIRMOBFOR authority commensurate with his responsibility, and would represent a full return to the proven theater airlift commander concept. Its sole drawback would be the addition of another layer of command.

Another recommendation would affect OPCON of the AME. I have noted the incompatibility of AMC's retaining OPCON. It would be appropriate for AMC to retain OPCON of finite transient assets that must be available to support the global nature of AMC's mission. However, the AME deploys to support a specific theater. Without AME control, the DIRMOBFOR himself lacks unity of command. The DIRMOBFOR is dual

hatted as both the senior AMC representative and theater airlift manager. The AME could serve a similar dual hatted role as 1) TACC representative to the theater and 2) theater strategic mobility advisor. To provide standardized command and control procedures between the AME and TACC, ownership of the AME should be resolved in favor of unity of command. DIRMOBFOR should be the theater air mobility "boss."

A final recommendation concerns depth of the doctrine. The draft proposal evaluated here is a service proposal. The entire air mobility force is "owned" by the Air Force. Any significant joint operation involving air mobility will draw heavily from that service. Thus, Air Force doctrine will most likely be the default position for the JFACC to draw from in establishing his organization. Future JFACCs may not be sourced from the Air Force; JFCs most likely will not be Air Force officers either. This potential constraint indicates the need for the draft proposals and those offered in this paper to be incorporated into joint doctrine. For these changes to be accepted and integrated across the entire joint community, they must be integrated into joint publications.

CONCLUSION

With the increasingly expeditionary nature of the US military, air mobility will remain a critical mission for all geographic CINCs. It is very doubtful the threats we will face in the future will allow us time to develop a theater mobility system from the ground up. Future lean logistics concepts will depend on responsive mobility assets. A seamless system commanded and managed by mobility professionals offers the best solution for joint force commanders.

Air Force reorganization and the resulting structures reflected in current doctrine moved us away from proven concepts. Recent experience in contingency operations exposed more gaps in the system. Proposed revisions to service doctrine go far towards closing the gaps by formally designating DIRMOBFOR as the theater airlift manager. Further adjustments will only improve the system. Continuing the evolution of the role of the DIRMOBFOR to more closely resemble the COMALF of the past offers the best chance to strike an appropriate balance between competing imperatives of efficient use of scarce mobility resources and theater unity of command.

NOTES

[1] U.S. Air Force, Air Force Doctrine Document 1, Air Force Basic Doctrine (Washington, D.C.: September 1997), 54-55.

[2] Ibid, 62.

[3] Charles Miller, Airlift Doctrine (Maxwell AFB, AL: Air University Press, March 1988), 1.

[4] Richard Deveraux, Theater Airlift Management and Control: Should We Turn Back the Clock to Be Ready for Tomorrow? (Maxwell AFB, AL: Air University Press, September 1994), 9.

[5] Ibid, 11-12.

[6] Ibid, 38.

[7] Ibid, 26-27.

[8] Ibid, 26.

[9] Chris Krisinger, "Towards a Seamless Mobility System: The C-130 and Air Force Reorganization," Airpower Journal, Fall 1995, 32.

[10] Joint Chiefs of Staff, Joint Tactics, Techniques, and Procedures for Airlift Support to Joint Operations (Joint Pub 4-01.1) (Washington, D.C.: 20 July 1996), I-5, I-6.

[11] U.S. Air Force, Air Force Doctrine Document 30, Airlift Operations (Washington, D.C.: 28 April 1995), 14.

[12] Joint Chiefs of Staff, Doctrine for Joint Operations (Joint Pub 3-0) (Washington, D.C.: 1 February 1995), II-10.

[13] Joint Pub 4-01.1, II-10, II-11.

[14] Joint Chiefs of Staff, Joint Tactics, Techniques, and Procedures for Theater Airlift Operations (Joint Pub 3-17) (Washington, D.C.: 18 July 1995), II-1, II-2.

[15] Deputy Chief of Staff, Plans and Operations, Headquarters, United States Air Force, JFACC Primer (Washington, D.C.: February 1994), 1-52.

[16] U.S. Central Command, "Chain of Command and OPCON Relationships," Joint Universal Lessons Learned Number 13010-17000, 30 January 1993.

[17] Air Mobility Command, "Command and Control of Airlift Assets," Joint Universal Lessons Learned Number 53648-29300, 8 February 95.

[18] Allied Forces Southern Europe, "Fact Sheet," <http://www.afsouth.nato.int/factsheets/SFORFactSheet.htm>, 22 March 1999.

[19] U.S. European Command, "No Theater Expertise Exists for Scheduling Large Scale Airlift Operations," Joint Universal Lessons Learned Number 61474-04700, 15 January 1996.

[20] Gordon Ettenson to COMAIRSOUTH, 8 December 1997, "End of Tour Report," Vicenza, Italy.

[21] Chris Krisinger, "Airlift to the Balkans: Something New, Something Old," Defense Transportation Journal, June 1998, 16-17.

[22] Walter Kross, "Single Port Management," Joint Forces Quarterly, Winter 1996-97, 54.

[23] Edward McAllister, ALCC Director from November 1998 to January 1999, interview by author, 9 April 1999.

[24] Scott Goodwin to 4404 OG (P)/CC, 10 April 1998, "End of Tour Report," Prince Sultan AB, Saudi Arabia.

[25] McAllister.

[26] Deveraux, 56.

[27] Kross, 54.

[28] Deveraux, 56.

[29] Ettenson.

[30] More detailed examples of command and control problems can be found in the papers by Deveraux, Kee, Kochanski, and Melville.

[31] Steven Watkins, "C-130s headed back to Air Mobility Command," Air Force Times, 4 November 1996, 3.

[32] U.S. Air Force, Air Force Doctrine Document 2-6, Air Mobility (Draft), (Washington, D.C.: October 1998), 23.

[33] Air Force Doctrine Document 2-6 (Draft), 27-31.

[34] U.S. Air Force, Air Force Doctrine Document 2-6.1, Airlift Operations (Draft), (Washington, D.C.: 16 March 1999), 23.

[35] Krisinger, "Towards a Seamless Mobility System," 38.

[36] Air Force Doctrine Document 2-6.1 (Draft), 7-8.

[37] Air Force Doctrine Document 2-6 (Draft), 31.

[38] Ibid, 24.

[39] Joint Pub 3-0, III-14.

BIBLIOGRAPHY

Air Mobility Command. "Command and Control of Airlift Assets." Joint Universal Lessons Learned Number 53648-29300. 8 Feb 95.

Allied Forces Southern Europe. "Fact Sheet." <http://www.afsouth.nato.int/factsheets/SFORFactSheet.htm>. 22 March 1999.

Deputy Chief of Staff, Plans and Operations, Headquarters, United States Air Force. JFACC Primer. Washington, D.C.: February 1994.

Deveraux, Richard. Theater Airlift Management and Control: Should We Turn Back the Clock to Be Ready for Tomorrow?. Maxwell AFB, AL: Air University Press, September 1994.

Ettenson, Gordon to COMAIRSOUTH. 8 December 1997, "End of Tour Report." Vicenza, Italy.

Goodwin, Scott to 4404 OG (P)/CC, 10 April 1998. "End of Tour Report." Prince Sultan AB, Saudi Arabia.

Kee, Randy. Bridging the Gulf Between Theater and Strategic Air Mobility. Wright-Patterson AFB, OH: Air Force Institute of Technology, November 1996.

Kochanski, Donald. Command and Control of Theater Airlift. Wright-Patterson AFB, OH: Air Force Institute of Technology, May 1997.

Krisinger, Chris. "Airlift to the Balkans: Something New, Something Old." Defense Transportation Journal, June 1998, 16-17.

_____. "Towards a Seamless Mobility System: The C-130 and Air Force Reorganization." Airpower Journal, Fall 1995, 30-45.

Kross, Walter. "Single Port Management." Joint Forces Quarterly, Winter 1996-97, 53-57.

McAllister, Edward, ALCC Director from November 1998 to January 1999. Interview by author. 9 April 1999. Andrews AFB, Maryland.

Melville, Mark. The Director of Mobility Forces and Command and Control of Airlift. Wright-Patterson AFB, OH: Air Force Institute of Technology, November 1996.

Miller, Charles. Airlift Doctrine. Maxwell AFB, AL: Air University Press, March 1988.

Owen, Robert. "The Airlift System: A Primer." Airpower Journal, Fall 1995, 16-29.

U.S. Air Force. Air Force Doctrine Document 30, Airlift Operations. Washington, D.C.: 28 April 1995.

U.S. Air Force. Air Force Doctrine Document 1, Air Force Basic Doctrine. Washington, D.C.: September 1997.

U.S. Air Force. Air Force Doctrine Document 2, Organization and Employment of Aerospace Power. Washington, D.C.: 28 September 1998.

U.S. Air Force. Air Force Doctrine Document 2-6, Air Mobility (Draft). Washington, D.C.: October 1998.

U.S. Air Force. Air Force Doctrine Document 2-6.1, Airlift Operations (Draft). Washington, D.C.: 16 March 1999.

U.S. Air Force. 45 Years of Global Reach and Global Power, The United States Air Force and National Security: 1947-1992. Washington, D.C.: 1992.

U.S. Central Command. "Chain of Command and OPCON Relationships." Joint Universal Lessons Learned Number 13010-17000. 30 January 1993.

U.S. European Command. "No Theater Expertise Exists for Scheduling Large Scale Airlift Operations." Joint Universal Lessons Learned Number 61474-04700. 15 January 1996.

U.S. Joint Chiefs of Staff. Doctrine for Joint Operations (Joint Pub 3-0) Washington, D.C.: 1 February 1995.

U.S. Joint Chiefs of Staff. Joint Tactics, Techniques, and Procedures for Theater Airlift Operations (Joint Pub 3-17) Washington, D.C.: 18 July 1995.

U.S. Joint Chiefs of Staff. Joint Tactics, Techniques, and Procedures for Airlift Support to Joint Operations (Joint Pub 4-01.1) Washington, D.C.: 20 July 1996.

Watkins, Steven. "C-130s are headed back to Air Mobility Command." Air Force Times. 4 November 1996, 3.

APPENDIX

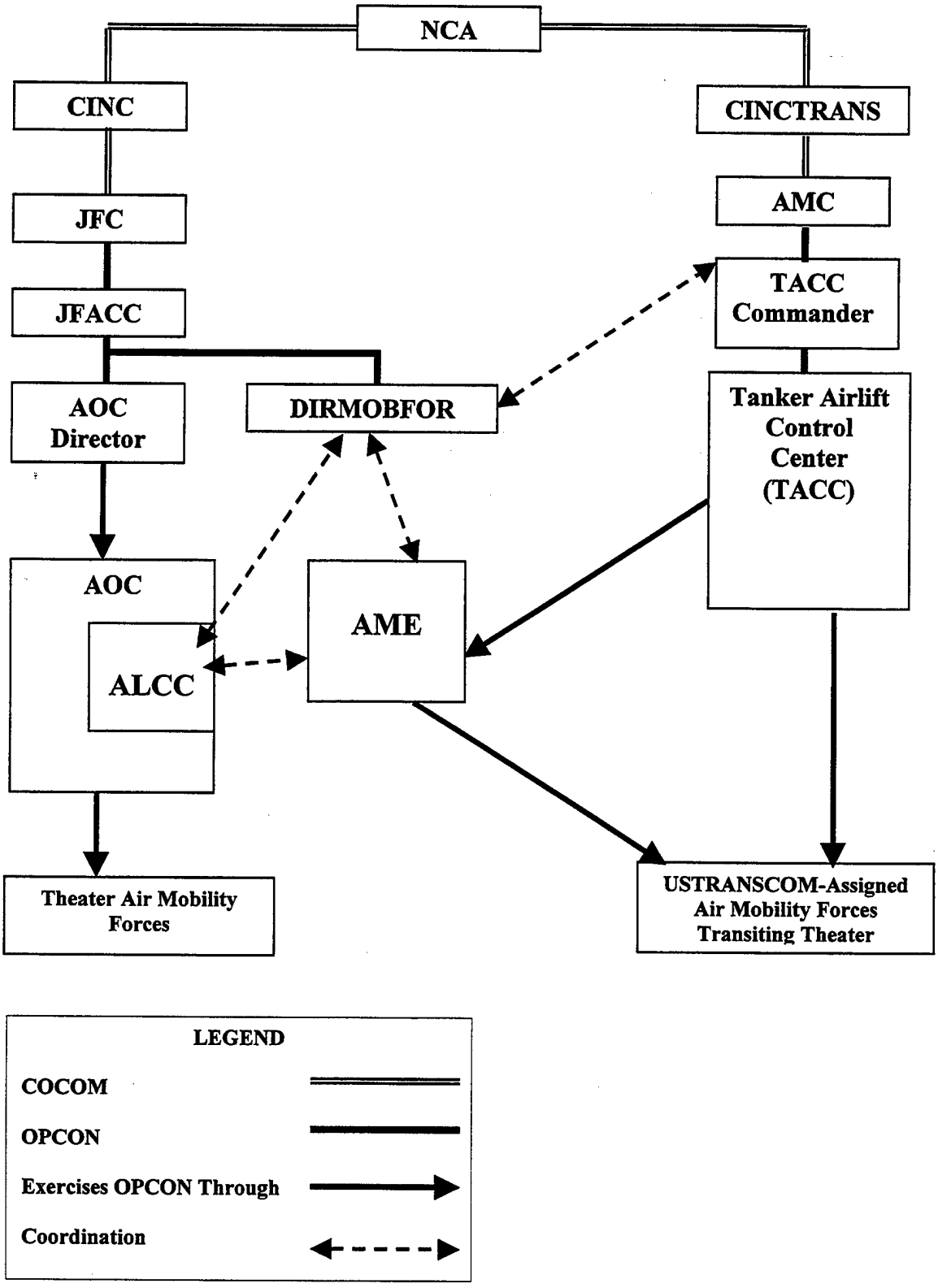

Figure 1 Current Command and Control Arrangement

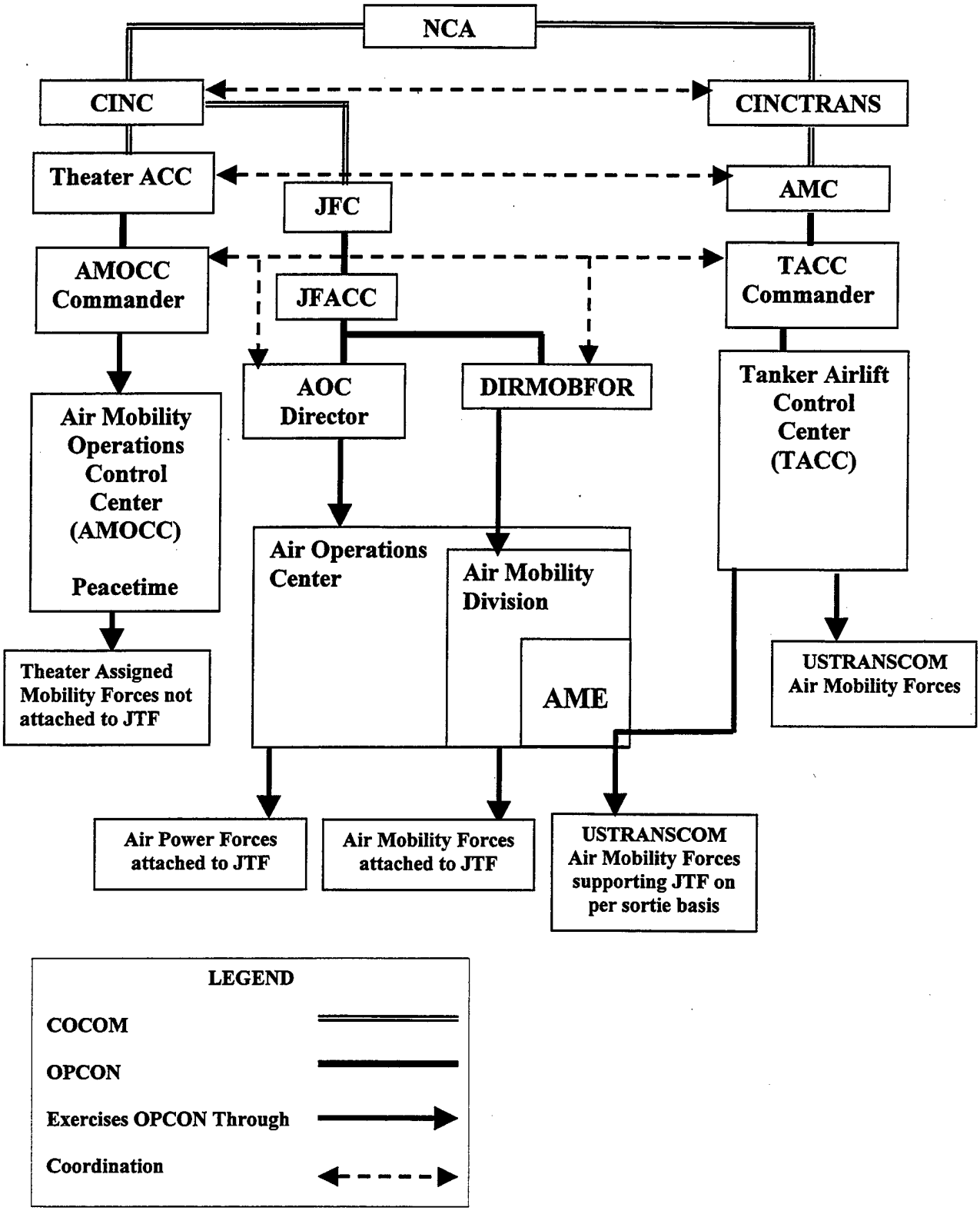

Figure 2 Proposed Command and Control Arrangement